IN THE CLAIMS

Claim 1 has been amended to correct the typographical error on line 3, adding "comprising" after "communication". Additionally, claim 6 has been corrected to include the text of line 1, which was inadvertently omitted.

Attached hereto is a complete list of the amended claims 1-21 and 23-24.

4

CLAIM AMENDMENTS

1. (Currently Amended) A system for automatic and seamless vertical roaming (SVR) between a wireless local area network (WLAN) and a wireless wide area network (WWAN) while maintaining an active voice or data communication~ comprising:

    (a) a mobile station for WWAN and WLAN transmissions to the WLAN and the WWAN network;

    (b) a WLAN gateway linked to the mobile station by a WLAN bi-directional communication link and operating in the Global System Mobile (GSM)/General Packet Radio Service (GPRS) or IEEE 802.11 modes;

    (c) a base transceiver station operating in the GSM GPRS modes for servicing the WWAN and linked to the mobile station by a WWAN bi-directional communication link;

    (d) a switched network including a mobile switching center connected to the WLAN gateway and the base transceiver station; and

    (e) WLAN command apparatus to initiate transfer of traffic between the mobile station and a remote user on the WLAN via the gateway to the WWAN when signal degradation occurs.

5

2.   (Original) The system of Claim 1 further comprising:

(g)   WWAN command apparatus to initiate transfer of traffic between the mobile

station and a remote user via the WWAN to the gateway to the WLAN when the

mobile station enters the WLAN area.

3.   (Original) The system of Claim 1 further comprising:

(h)   a dual mode radio for SVR switching between the WWAN and WLAN and vice

versa as a user travels between the networks.

4.   (Original) The system of Claim 1 further comprising:

(i)   a mobile switching center providing an Explicit Call Transfer (ECT) function for

SVR switching between WLAN/WWAN networks.

5.   (Original) The system of Claim 1 further comprising:

(j)   WLAN signaling apparatus for interleaving WLAN signaling in vacant

GSM/GPRS traffic slots.

6.   (Original) The system of claim 1 further comprising:

(k)   traffic apparatus for interleaving WLAN/WWAN voice/data traffic in vacant

GSM/GPRS signaling slots.

6

7.   (Original) The system of Claim 1 further comprising:

(l)   An SVR interface linking a dual mode radio API with a GSM/GPRS protocol

stack and a WLAN IEEE 802.11 protocol stack.

8.   (Original) The system of Claim 7 wherein the SVR interface further comprises a three-

layer communication interface.

9.   (Original) The system of Claim 1 further comprising:

a jitter buffer in the WLAN to transform random packet arrival times into uniformly

spaced streaming data.

10.   (Original) The system of Claim 1 further comprising:

circuit switching apparatus between the WWAN and the WLAN for maintaining a

connection between parties on the WWAN and the WLAN when transferring from WWAN to

the WLAN and vice versa.

11.   (Original) A method for automatic and seamless vertical roaming between a wireless

local area network (WLAN) and a wireless wide area network (WWAN) while maintaining an

active voice or data connection comprising the Steps of:

7

Serial No. 10/014,448

PAGE 8/16 * RCVD AT 11/21/2005 6:39:16 PM [Eastern Standard Time] * SVR:USPTO-EFXRF-6/25 * DNIS:2738300 * CSID:7139347011 * DURATION (mm-ss):02-56

(a) issuing a command to the WWAN by a mobile station including a dual mode Radio capable of WWAN and WLAN transmission, the command initiating transfer of a voice or data call on the WWAN to a remote party on the WLAN;

(b) checking whether or not a gateway is linked to the dual mode Radio for WLAN transmissions while maintaining the call between the remote party and the mobile station;

(c) verifying by the dual mode Radio that the caller identification is from a WWAN transmission and signaling the WLAN gateway to accept the call;

(d) storing the packets at the mobile station while waiting for the establishment of a WLAN connection;

(e) dropping the WWAN transmission for the call by the WWAN network; and

(f) connecting the caller via the gateway and releasing the stored packets to the dual mode Radio for WLAN transmission.

12. (Original) A method for automatic and seamless vertical roaming between a wireless local area network (WLAN) and a wireless wide area network (WWAN) while maintaining an active voice or data connection comprising the steps of:

(a) issuing a command to the gateway by a mobile station including a dual mode Radio capable of WWAN and WLAN transmission, the command

8

initiating transfer of a VoIP call or data communications on the WLAN to

a remote party on the WWAN;

(b)   checking by the WWAN network whether or not the dual mode Radio for

WWAN transmissions is registered to the WWAN network while

maintaining the call between the remote party and the mobile station;

(c)   verifying by the dual mode Radio that the caller identification is from a

WLAN transmission and signaling the WWAN network to accept the call;

(d)   storing the packets at the mobile station while waiting for the

establishment of the WWAN connection;

(e)   dropping the WLAN transmission for the call by the WLAN network; and

(f)   connecting the caller to the mobile station via the WWAN network and

releasing the stored packets to the dual mode Radio for WWAN

transmissions.

13.   (Previously Amended) The method of Claims 11 or 12 further comprising:

(g)   initiating transfer of traffic between the mobile station and a remote user

via the WWAN to the WLAN when the mobile station enters the WLAN

area.

9

14. (Previously Amended) The method of Claims 11 or 12 further comprising:

    (h) switching a dual mode radio between the WWAN and the WLAN and vice versa as a user travels between the networks.

15. (Previously Amended) The method of Claims 11 or 12 further comprising:

    (i) providing an Explicit Call Transfer (ECT) function for SVR switching between WLAN/WWAN networks when a user roams in the networks.

16. (Previously Amended) The method of Claims 11 or 12 further comprising:

    (j) interleaving WLAN signaling in vacant GSM/GPRS traffic slots.

17. (Previously Amended) The method of Claims 11 or 12 further comprising:

    (k) interleaving WLAN/WWAN voice/data traffic in vacant GSM/GPRS signaling slots.

18. (Previously Amended) The method of Claims 11 or 12 further comprising:

    (l) linking a dual mode radio API with a GSM/GPRS protocol stack and a WLAN IEEE 802.11 protocol stack for SVR between WWAN and WLAN and vice versa.

10

19.   (Original) The method of Claim 18 wherein the SVR interface further comprises a three-layer communication interface.

20.   (Previously Amended) The method of Claims 11 or 12 further comprising:

transform random packet arrival times into uniformly spaced streaming data using a jitter buffer.

21.   (Previously Amended) The method of Claims 11 or 12 further comprising:

maintaining a connection between parties on the WWAN and the WLAN when transferring from WWAN to the WLAN and vice versa.

22.   (Previously Amended) A medium, executable in a computer system for automatic and seamless vertical roaming between a wireless local area network (WLAN) and a wireless wide area network (WWAN) while maintaining an active voice or data connection comprising:

    (a)   program instructions issuing a command to the WWAN by a mobile station including a dual mode Radio capable of WWAN and WLAN transmission, the command initiating transfer of a voice or data call on the WWAN to a remote party on the WLAN;

    (b)   program instructions checking whether or not a gateway is linked to the dual mode Radio for WLAN transmissions while maintaining the call between the remote party and the mobile station;

11

(c)   program instructions verifying by the dual mode Radio that the caller

identification is from a WWAN transmission and signaling the WLAN

gateway to accept the call;

(d)   program instructions storing the packets at the mobile station while

waiting for the establishment of a WLAN connection;

(e)   program instructions dropping the WWAN transmission for the call by the

WWAN network; and

(f)   program instructions connecting the caller via the gateway and releasing

the stored packets to the dual mode Radio for WLAN transmission.

23.   (Previously Amended) A medium, executable in a computer system for automatic and

seamless vertical roaming between a wireless local area network (WLAN) and a wireless wide

area network (WWAN) while maintaining an active voice or data connection comprising:

(a)   program instructions issuing a command to the gateway by a mobile station

including a dual mode Radio capable of WWAN and WLAN transmission, the

command initiating transfer of a VoIP call or data communications on the WLAN

to a remote party on the WWAN;

(b)   program instructions checking by the WWAN network whether or not the dual

mode Radio for WWAN transmissions is registered to the WWAN network while

maintaining the call between the remote party and the mobile station;

12

(c)   program instructions verifying by the dual mode Radio that the caller

identification is from a WLAN transmission and signaling the WWAN network

to accept the call;

(d)   program instructions storing the packets at the mobile station while waiting for the

establishment of the WWAN connection;

(e)   program instructions dropping the WLAN transmission for the call by the WLAN

network; and

(f)   program instructions connecting the caller to the mobile station via the WWAN

network and releasing the stored packets to the dual mode Radio for WWAN

transmissions.

13

Serial No. 10/014,448